



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RBW6305G14031-3G
Job Sheet 172397



2116

Part No: RBW6305G14031-3G

Job Qty: 3 ea

Part Name: Gimball Carbon Seal Remover



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/16/18

Job Tracking No:

Due Date: 4/16/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBW6305G14031-3G Rev 2 IPP Rev A 18.02.15 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	3 pcs		4/16/18	0.00	0.00	Purchasing		At 18/05/01
110	Packaging	3 pcs		4/16/18	0.00	0.00	Packaging2		At 18/05/01
120	QC	3 pcs		4/16/18	0.00	0.00	QC6		38
130	Packaging	3 pcs		4/16/18	0.00	0.00	Packaging3		MAY 02 2018
140	QC21-FG	3 Ea		4/16/18	0.00	0.00	QC21		GA092

Part Op 100 - Issue PO to ARROW TECH MACHINE WORKS P/O: 057084 MANUFACTURE RBW6305G14031-3G AS PER
Descriptions: DWG -Certificate of conformity is required

DAS
9-50

FEB 22 2018

RELS

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBW6305G14031-3GP	Gimball Carbon Seal Remover	3 (1 ea)	100-Purchasing	5067403

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBW6305G14031-3GP	3	0	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

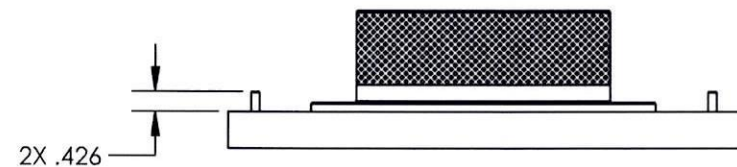
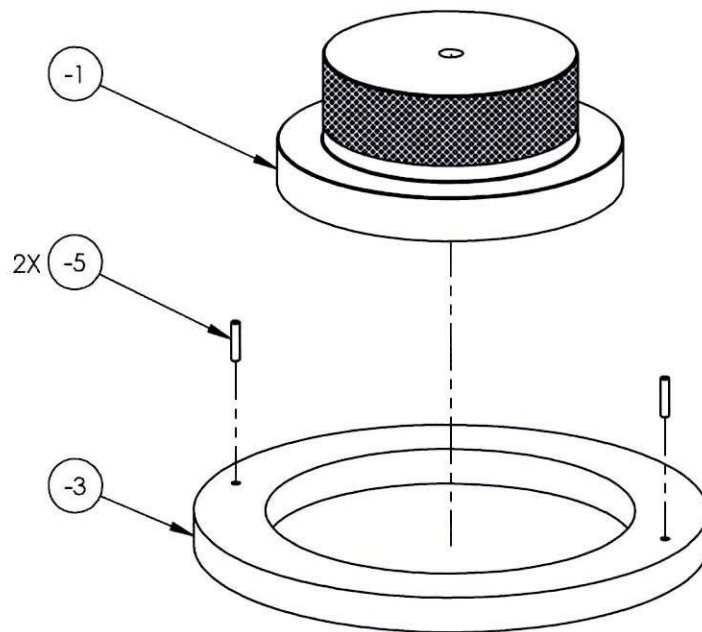
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																																																	
Description Work Order Deviation																																																					
Job No: 172397 Mtg Date: 05/01/18 RBW6305G14031 - 3G Serial No/Batch: S067404 Revision: _____ Operation: _____ Change No: _____ Packaging Gimball Carbon Seal Remover S067404 Container No: _____ DART AEROSPACE																																																					
Root Cause <table border="0"> <tr><td>Environment</td><td>☐</td><td>No Re-verfi</td><td>☐</td></tr> <tr><td>Design</td><td>☐</td><td>Operator</td><td>☐</td></tr> <tr><td>Doc/Data</td><td>☐</td><td>Offset/Setu</td><td>☐</td></tr> <tr><td>Equip/Tooling</td><td>☐</td><td>Supplier</td><td>☐</td></tr> <tr><td>Handling/Pre</td><td>☐</td><td>Training</td><td>☐</td></tr> <tr><td>Material</td><td>☐</td><td>Use for Testin</td><td>☐</td></tr> <tr><td>Internal Transport</td><td>☐</td><td>Poor Informat</td><td>☐</td></tr> <tr><td>Tribal Knowledge</td><td>☐</td><td>Rushing</td><td>☐</td></tr> <tr><td>LOA</td><td>☐</td><td>Product Improvement</td><td>☐</td></tr> <tr><td>Substation</td><td>☐</td><td>Process Improvement</td><td>☐</td></tr> <tr><td>Past Expiry Date</td><td>☐</td><td>Manufacturing Process</td><td>☐</td></tr> <tr><td>Misidentified</td><td>☐</td><td>Past Due</td><td>☐</td></tr> </table> OTHER : _____						Environment	☐	No Re-verfi	☐	Design	☐	Operator	☐	Doc/Data	☐	Offset/Setu	☐	Equip/Tooling	☐	Supplier	☐	Handling/Pre	☐	Training	☐	Material	☐	Use for Testin	☐	Internal Transport	☐	Poor Informat	☐	Tribal Knowledge	☐	Rushing	☐	LOA	☐	Product Improvement	☐	Substation	☐	Process Improvement	☐	Past Expiry Date	☐	Manufacturing Process	☐	Misidentified	☐	Past Due	☐
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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
A		CH'D -1 BOM INFO PER S.E. CH'D -3 P.F. FROM -43 PER G.E.	5/9/2011	RJC	RW
B		CH'D TOOL NAME WAS UPPER MODULE LIP SEAL REMOVER IS TOOL. UPPER MODULE LIP SEAL INSTALLER TO MATCH PARTS MANUAL.	11/1/2013	RJC	RW
1		-1 CH'D DIM WAS 1.62 IS 1.59. ADDED B/O INFO MCMASTER-CARR #98381A509. -3 CH'D DIM WAS Ø.187 ±.563 IS LIMITS Ø.1869 TO .1874 ±.56. CH'D TOLERANCE ON NON-CRITICAL PARTS.	5/14/2014	DPD	GE
2	17-0093	UPDATED TO NEW STANDARD. ADDED OEM REF NOTE. -1 CH'D DIM WAS 2.952 IS 2.95. ADDED MED KNURL NOTE.	4/20/2017	DPD	JAG



NOTES:

1. PART OF KIT RBW6305G01531-3G, BOX ONE RBW6305G19631-3G.
2. REF. AGUSTA T/N: 3G6305G14031.

DART AEROSPACE	
TITLE TOOL, UPPER MODULE LIP SEAL INSTALLER	
DWG NO. RBW6305G14031-3G	REV 2
MAT'L HEAT TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125/✓
DRAWN BY: CLOUGH	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: RJC 04/21/2017	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: AA 05/09/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: JL 05/10/2017	USED ON MODEL AW139
APPROVED: JAG 05/18/2017	
SCALE 1:4	DATE 2/4/2011
SHEET 1 OF 3	

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	TOP	6061		2
			-3	1	BASE	6061		3
		B/O	-5	2	DOWEL PIN	STEEL	Ø3/16 X 7/8 (MCMASTER-CARR #98381A509)	1

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					



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PURCHASE ORDER PO039084

Items											
Line Item	Part	Supplier Part No	Item No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
Line Item Note job# 172405											
23	RBW6305G13731-3GP			Gimball Carbon Seal Remover As Per Dwg RBW6305G13731-3G Rev. 2	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$362.28/Ea	\$1,086.84
							✓ 3x			AT 1804/26	
Line Item Note job# 172401											
24	RBW6305G13231-3GP			Gimball Carbon Seal Installer As Per Dwg RBW6305G13231-3G Rev. B	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$984.42/Ea	\$2,953.26
Line Item Note job# 172399											
25	RBW6305G14031-3GP			Gimball Carbon Seal Remover As Per Dwg RBW6305G14031-3G Rev. 2	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$639.24/Ea	\$1,917.72
							✓ 3x			AT 1804/01	
Line Item Note job# 172397											
26	RBW6305G14331-3GP			Upper Module Lip Seal Installer As Per Dwg RBW6305G14331-3G Rev. 1	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$758.42/Ea	\$2,275.26
Line Item Note job# 172382											
27	RBW6305G18251-3GP			Guide Pumps/Ecs Drive Quill Seal Housing Installer As Per Dwg RBW6305G18251-3G Rev. A	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$132.32/Ea	\$396.96
							✓ 3x			AT 1804/16	
Line Item Note job# 172381											
28	RBW6305G17631-3GP			Tool Pump 1-2-3 Drive Quill Lip Seal Remover As Per Dwg RBW6305G17631-3G Rev. B	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$496.30/Ea	\$1,488.90
							✓ 3x			AT 1804/26	
Line Item Note job# 172378											
29	RBW6305G17931-3GP			Tool Pump 1-2-3 Drive Quill Lip Seal Installer As Per Dwg RBW6305G17931-3G Rev. B	Firmed	4/9/18	3 Ea	0 Ea	3 Ea	\$392.72/Ea	\$1,178.16
							✓ 3x			AT 1804/16	
Line Item Note job# 172377											
30	RBW6305G17131-3GP			Drive Quill Seal Housing Removal Tool As Per Dwg RBW6305G17131-3G Rev. 3	Firmed	4/16/18	3 Ea	0 Ea	3 Ea	\$905.64/Ea	\$2,716.92
							✓ 3x			AT 1804/26	
Line Item Note job# 172376											



ARROW TECH MACHINE WORKS

Certificate of Conformance

Your Purchase Order No: 039084

Dated: 04/27/2018

Our Order / Job No: 07AWT

Order Qty: 3

Part Name: Tool, Upper Module Lip Seal Installer

Part Number: RBW6305G14031-3G

Lot Size:N/A

Ship Date: 04/27/2018

We certify that these parts shipped to you are of domestic or international manufacture and conform to all requirements of the Purchase Order. These parts have been manufactured and inspected in accordance with all required specifications, instructions and drawings. Any applicable specifications are listed below:

Drawing Number: RBW6305G14031-3G

Rev: 2

Material Size and Type: -1/6061 ALUM.; -3/ 6061 ALUM.

Material Specifications: ALUM – ASTM B221;

Heat Treatment: N/A

Plating/Finish: CLEAR ANODIZE: MIL-A-8625F TYPE II, CLASS I

Mercury Contamination: The material used to process this order has not come in contact with mercury or mercury bearing instruments.

DAS
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2-80

MAY 02 2018

Date:

04/27/18

Signed:

PHGE Machine Works LLC dba Arrow Tech Machine Works
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Main: (541) 780-6938 | Fax: (458) 215-4938
www.atechmachineworks.com